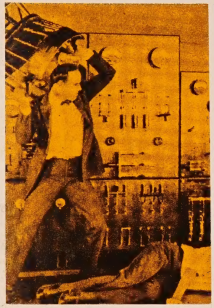
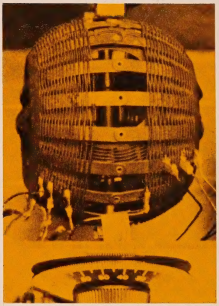
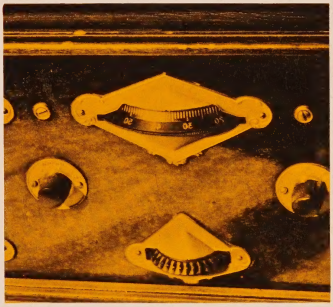
CHRS official
JOURNAL
Vol. 5 No.1 March 1980







CHRS official
JOURNAL
Vol. 5 No. 1 March 1980

CONTENTS

Radio License Plate.....1
Swap Meet..... 2
How to Make Basket-Weave Coils.....4
Obituarys..... 5
Collector Spotlight: Bob Avery..... 6
Publications..... 8
Featured Home-Brew Set.....10
Featured Set: Grebe MU-1 Synchrophase..... 12
Tube Column: The Myer's Tube..... 16
Novelty Nook.....19
"The Hylo-1904".....20
Restoration Hints.....23
Editor's Corner..... 24
Collector Ads.....IBC

Contents © 1979, CHRS, Inc.

Dr. Charles D. Herrold Award:
Bruce Kelley (1978)
Joe Horvath (1979)

Honorary Lifetime Member:
Paul Courtland Smith (1978)

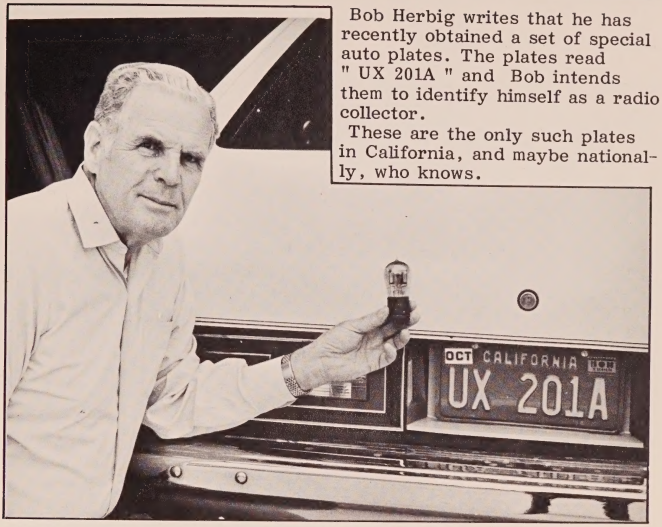
CHRS Official Journal is published by California Historical Radio Society, Box 1147, Mountain View, CA 94040.

Address membership correspondence to James Cirner, CHRS Treasurer, 13366 Pastel Lane, Mountain View, CA 94040. Articles and non-commercial ads for the Journal should be submitted to Allan Bryant, Editor, 38262 Ballard Drive, Fremont, CA 94536. Historical data for copying or donation should also be sent to the Editor.

THE SOCIETY: The California Historical Radio Society is a non-profit corporations chartered, in 1974, to promote the restoration and preservation of early radio and radio broadcasting. CHRS provides a medium for members to exchange information on the history of radio, particularly in the west, with emphasis in areas such as collecting, cataloging and restoration of equipment, literature and programs. Regular swap meets are scheduled at least four times a year, in the San Jose area.

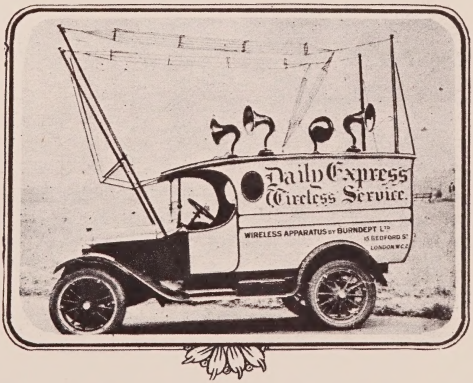
President: Norman Berge
Secretary: Dave Brodie
Treasurer: James Cirner
Legal Counsel: Eugene Rippen
Publisher & Printer: Don Stoll
Journal Editor: Allan Bryant
Technical Editor: Floyd Paul
Tube Editor: Russ Winenow
Publications Editor: Dave Brodie
Spotlight Editor: Edward Sage
Photography: George Durfey
Circulation Manager: Larry LaDuc

The OFFICIAL JOURNAL of CHRS is published quarterly and furnished free to all members. The first issue (published in September 1975) is still available ($2.00), other early issues are $1.00 each. Articles for the Journal are solicited from all members. Appropriate subjects include restoration hints, information on early radio broadcasts and personalities, anecdotes about the pioneers, etc. Anyone interested in assisting in producing the Journal should contact the Editor.



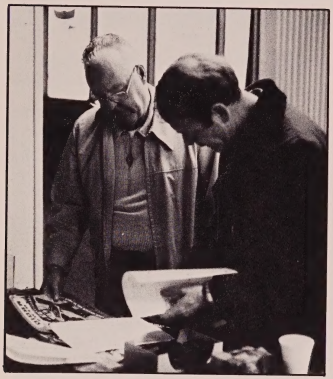
Bob Herbig writes that he has recently obtained a set of special auto plates. The plates read " UX 201A " and Bob intends them to identify himself as a radio collector.

These are the only such plates in California, and maybe nationally, who knows.



JANUARY SWAP MEET

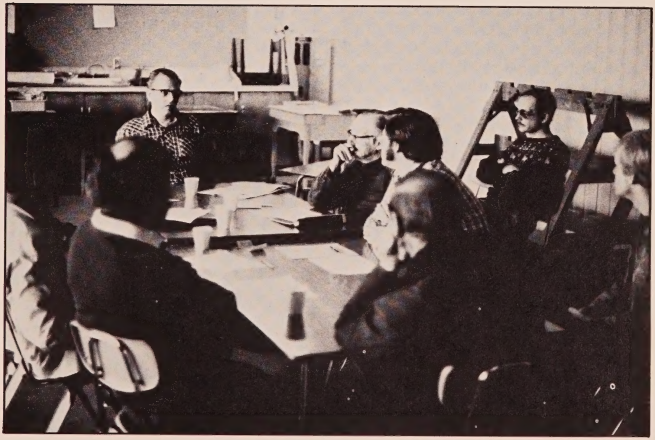
Photos by George Durfey



Mac and Lorraine
McKinney of San Pedro, Calif.

HIGH CLASS GEAR

Don Pettee



How to make Basketweave Coils

by Joe Horvath

NOTE: The photograph of this basket-weave coil was not available at the time of publication, and will appear in the next Journal as an addendum.

Basket weave coils are very easy to make, are highly efficient and look good in a set. First, get yourself a good piece of wood, preferably Oak or some other solid Hardwood, about six inches square and about two inches thick, I say about because one can deviate a little from these dimensions.

Next locate the center in the wood and mark it good. You will need a bolt about 3/16" or ¼" in diameter by four to five inches long and 55 inches of wooden dowels cut into five inch lengths. The reason for the bolt is so that you can hold the coil form in a vise and still be able to turn it as you wind the wire on. Use ¼ inch wooden dowels.

Now take a pair of dividers and using the center mark make two circles one 3-3/8 and the other 2-5/8 inches in diameter. Divide each circle in eleven equally spaced markings. Using a 17/64-ths inch bit drill all of the holes in the two outer circles, being sure that you drill them straight. The wooden dowels should fit snug but still be able to slide them up and down. The center hole should be drilled out according to the size bolt that you will use, it should also be straight and snug fitting but still be able to turn it freely. Fitting the bolt in the center hole is like this: Slide a flat washer all the way to the head of the bolt, then push it through the center hole in the wooden block,then another flat washer followed by a one inch metal tubing spacer and then two nuts, the last one being the lock nut.

Now place the wooden dowels in the holes according to the size coil that you will want. Generally, the coil should be a little longer than the diameter. Fasten the center bolt in a vise and you are now ready to start winding your coil.

It now becomes apparent why the wooden dowels are made to slide up and down, by pushing them down to about an inch you will see how much easier it is to weave the wire. As you progress up with the winding of the coil you keep raising the wooden dowels.

It is best to use heavier wire for basket weave coils as they are self supporting and the coil will look much better and hold it's shape better too. #20 or so wire is a good size to use, D.C.C. or silk according to your stock and desire. You can now start to weave your coil, first wrap a full turn of wire around a dowel, leaving about three inches for a coil terminal, this will be the terminal side of your coil. Start weaving the wire on by going first inside of a dowel then on the outside. As you go along push the wire down neatly and keep raising the dowels as the coil grows.

After the coil is the size that you want tie it together with thin Nylon fish line in about six places where the wires cross one another. It can now be removed by pulling the dowels down threw the wind-

ings. The coils should be cemented at the points where they cross each other, a good cement is Duco but any good grade of coildope can be used. After the cement dries the Nylon can be removed if you wish.

Deciding on the size coil will take some thought. I myself pick out the variable condensers that I plan on using and with a grid dip meter the coils are made to the exact size. But one could also copy the demensions from an existing set. Neutrodynes generally use lots of coil and small capacity, so don't copy from a neutrodyne unless that is the set that you want to build. Generally a 23 plate condenser would use about 55 turns of 3½" diameter coils. These are High "Q" very efficient coils and can be used in any set.

Obituary

Jack Bailey Dies

Santa Monica- Jack Bailey, who crowned more than 5,000 women in 20 years of hosting the popular game show "Queen for a Day" on both radio and television, has died in a Santa Monica Hospital at age 72. After playing with jazz bands, directing musical comedy tent shows and barking for the World's Fair in Chicago in 1933, Bailey came to Hollywood in the early 1940's. He was the announcer for such radio hits as "Ozzie and Harriet," later another television series, "Duffy's Tavern," and "Meet the Missus." "Queen for a Day" made its debut on radio in 1945.

Jimmy Durante Dies

Jimmy Durante, the famed "Schnozzola", who joked and sang his way to fame at the expence of a huge nose, died at age 86. Durantes career encluded vaudeville, theater, movies, radio and television. His tortured vocabulary, singing, dancing, and keyboard clowning endeared him to millions. He was famous for his slow exit , coat slung over his shoulder, amid the beams of overhead spots and the inevitable goodnight to Mrs. Calabash.

Chester Lauck, the Lum of radio comedy team, dies

Hot Springs, Ark- Chester H. Lauck, who made millions of radio listeners laugh for more than two decades as half of the comedy team of Lum and Abner died after a brief illness. He was 79.

With Lauck as Lum Edwards and his boyhood friend, Norris Goff, as Abner Peobody, the two were heard on radio from 1931 to 1955, most of that time five nights a week for 15 minutes.

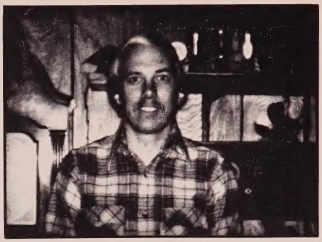
Their down-home routines from the Jot-'em-Down Store in the mythical town of Pine Ridge made them second in popularity only to Amos and Andy.

When the program ended in 1955 Lauck joined Continentail Oil Co. in Houston as vice president for public relations and remained there 12 years before retiring to his native Arkansas in 1967.

COLLECTOR SPOTLIGHT

BOB AVERY

3712 Glorietta N.E.
Albuquerque, N.M. 87111

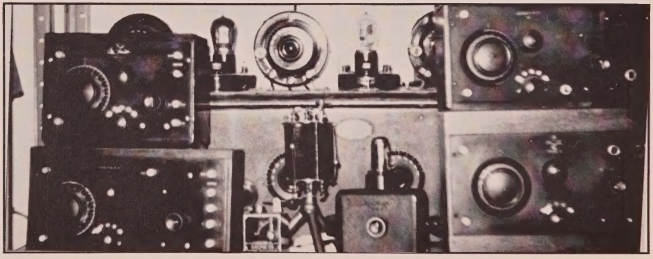


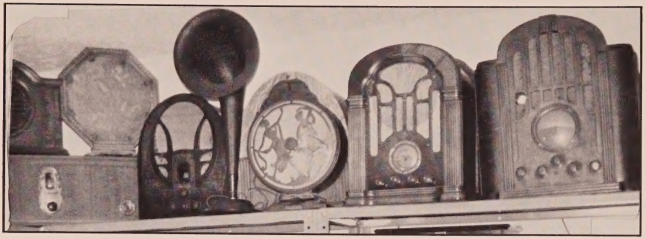
by Ed Sage

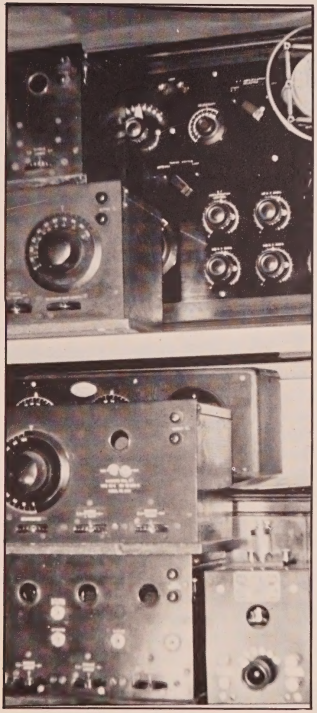
Collecting has fascinated me for approximately five years. I like to think that my main interests are early battery receivers. However, I still find myself picking up anything that has to do with radio when it stirs that feeling of "oh boy, I've got something special!". In my case this may be as common as a Philco cathedral or a 1939 Radio News.

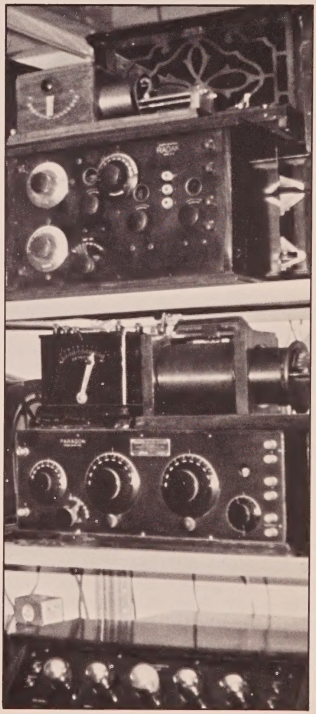
My collection ranges from Paragon to Scott, Duck to Philco, from Pilot Super Wasp to Pilot TV. The collection contains approximately 200 radios and I'm most interested in upgrading rather than expansion. As for favorites, I like them all with a special one or two out of each era of radio. I continue the quest for the very early and rare battery receivers, related items, and history. Who has some of these rare ones to part with?

There aren't many radio fanatics in New Mexico, so it would be a pleasure to chat with a few of you as you pass through Albuquerque. We might even make a trade or two.









PUBLICATIONS

1923 Sears, Roebuck and Co. Catalogue:

This is a reprint which is a soft-bound booklet, 6½" x 9¼", replete with pictures of sets, components and a few circuits used during the early twenties. The 50 pages of material provide fascinating reading, particularly for collectors who are too young to have been involved during those early days of radio. The older collectors will find may items displayed, as they browse through the booklet, which will remind them of the "good old days". A worth while addition to the bookshelf. (Available from R.M.Helms, 127 King George Road, Greenville, N.C. 27834.) Cost -- $2.50.

The Encyclopedia of Antique Radio - Volume 1:

This is a recent publication from JWF Puett of Puett Electronics. The author advised us that this is a continuation of the material found in the Vintage Radio Series and that additional volumes will be published in the future. The publication is soft-bound and consists of 40 pages (8½" x 11" approx.) which contain reproductions of components, radio, and test equipment of the 20's and 30's. The publication is an extension of Vintage Radio in that herein will be found sets etc. not included in the prior publication. The format is distinctly different that Vintage Radio in that no attempt has been made to dwell on the historical aspects of the equipment by narration. The entire publication is devoted to reproductions of the advertising material of that era which include, in all instances, pictures of the product. As the publisher states, this is a collector's reference publication. (Available from Puett Electronics, P.O. Box 28572, Dallas, Texas 75228). Cost-$7.95 post paid.

The Appraisal of Antique Radios:

The purpose of this pamphlet, according to the author, is to acquaint antique dealers,insurance companies, and beginning radio collectors with the value of various types of antique radios. As such, the publication serves a purpose. In addition, the experienced collector will find the author's definitions of the various conditions in which we find our s sets. Five factors to be considered in the appraisal process are submitted, together with explicit definitions of condition ranging from the proverbial "mint" to "bad". The pamphlet includes 16 pages devoted to reproductions of photographs of radios, spark equipment, and test equipment together with the author's opinion of the current range of prices applicable to each. Examples: Crosley Pup-$125 up;RA DA-$200 to $275, AK breadboards-$325 to $1300 up. This 20 page publication, 8¼" x 11" approx. is available from Puett Electronics at the above address. Cost-$4.95.

VINTAGE RADIO PUBLICATIONS

We recently received an inquiry regarding the availability of these publications. Our President, Norm Berge, informed us that the Society has a few of the following for sale:

J.W.F.Puett's Silver Ghosts-- $8.95

Saga of the Vacuum Tube--
$9.95
Vintage Radio--
$8.95
A Flick of the Switch 1930-1950--
$8.95
1927 Radio Encyclopedia--
(Hard-Cover) $14.95
1921-1932 Radio Collector's Guide
-- $6.95
Most- Often- Needed 1926-1938
Diagrams -- $7.00
Stamp Print Sets-4 print 8"x10"
-- $7.50

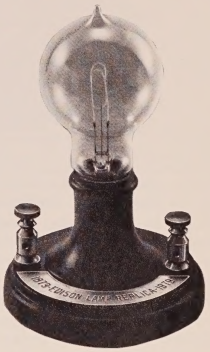
Since Vintage Radio is now in liquidation, orders for any of the above should now be placed with Norm Berge. We do not expect to replace our stock.

The Old Timer's Bulletin of A.W.A. (December 1979 issue):

We call your attention to pages 34 and 35 of this exemplary publication which include book reviews on two subjects of merit.

The first review related to "Streak of Luck", Life and Legend of Thomas Edison by Robert Conot. The reviewer states that this is the best ever written on the life of this genius. Several A.W.A. members heartily endorse this view. Available from Seaview Books. Cost-$15.95.

The second review was by none other than our own Thorn Mayes, W6AX and covers yet another book on Tesla. Sufficient to say that this publication consists of 437 pages, 9"x12" and is based on Tesla's notes of experiments conducted at Colorado Springs in 1899 and 1900. Originally published at the university he attended in Belgrade, Yugoslavia, the work has been translated into English and is now available from Omni Publications, P.O.Box 216, Hawthorne, Calif. 90250 Cost-$40 postpaid

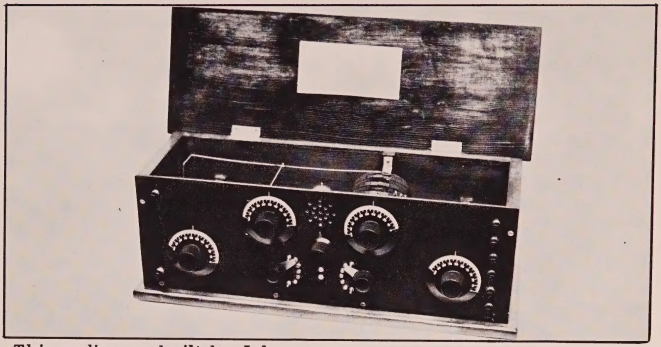


1879 Edison Lamp Replica

A working replica of the first practical incandescent electric lamp is now available. This replica is offered to commemorate the centennial of light (1879-1979). The lamp has a simulated hand-blown bulb (7½ watts), hardrock maple base, brass terminals and inscription plate. It comes complete with a 6ft. cord and switch.

The General Electric Lighting Institute sells the replica lamp complete post-paid for $17.00 each. Checks should be written to the "Lighting Bussiness Group-GE Company" and the inquiry addressed to the "General Electric Lighting Institute," Edison Replica Lamp, Nela Park, Cleveland, Ohio, 44112.

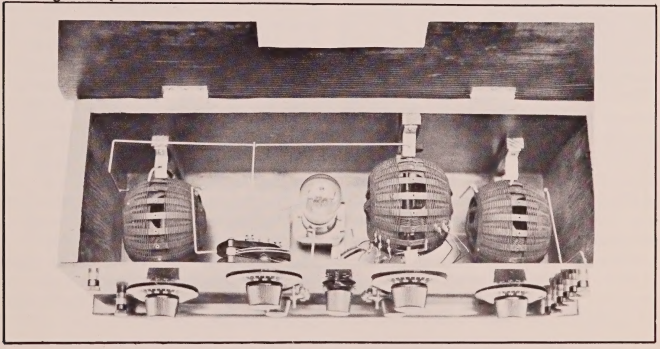
Featured Home-Brew Set

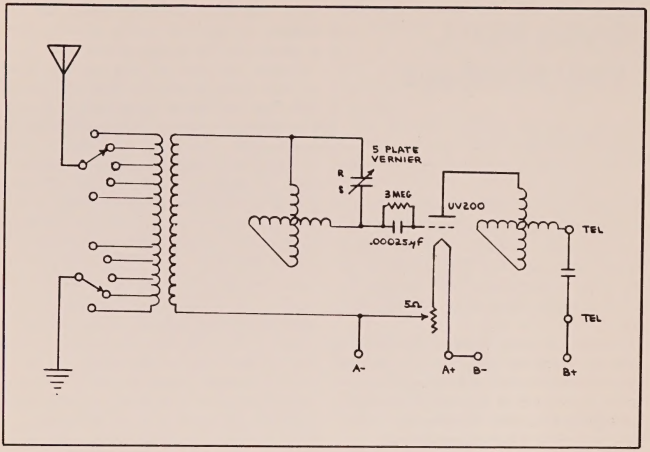


This radio was built by John Westover of Hayward, California. He grew up in St. Louis, Missouri and constructed this set in 1923.

He was supervisor of the radio parts section of a Woolworth-type store. He used two Amrad variometers and one variocoupler. The grid resistor is a pencil line type and the tube is a UV200. All parts were purchased from his parts department. This set uses a regeneration circuit. Regeneration in this set is produced by tuning the plate curcuit to the grid circuit by using the two variometers and the vernier capacitor. Station selection is done primarily with the variocoupler.

This circuit is described in "Everyman's Guide To Radio", Vol 1, sec XV, page 137. It is called the Two-Variometer Regenerator and is said to be exceptionally sensitive but at the same time difficult to control. Unless controlled intelligently it is practically impossible to obtain good reception.





FEATURED HOME-BREW SET
SCHEMATIC

DRAWN BY SCOTT WELCH

Editors Note:

It has become apparent that crystal and home-brew sets haven't been receiving the attention they deserve in our journal. To alleviate this problem a new column has been created, the "Featured Crystal / Home-Brew Set." Each issue an interesting crystal or home-brew set will be featured.

Do you have an interesting crystal or home-brew set that you would like to see featured in this column? If so send a B&W photo and negative, schematic, and as much information about the set that you can gather to the editor.

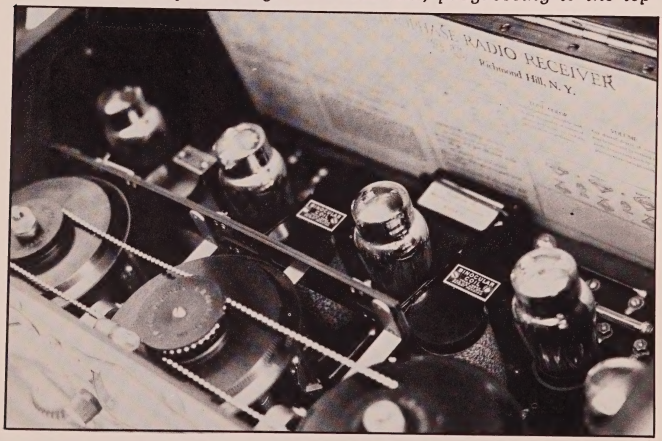
Grebe MU-1 Synchrophase

by Floyd A. Paul

In the fall of 1924 Radio News magazines carried Grebe Synchophases ads. Grebe made an MU-1 Synchophase (5-201A's) and the MU-2 Synchrophase (6-199's). This article describes the MU-1 set.

The set is well designed, built of solid mohogany and has embossed gold escutcheon plates. Grebe advertised several salient features, among them were Binocular coils, tone control and flexible unit control for tuning. By using two tuning ranges to cover the broadcast band Grebe claimed to have widened the reception range so that low wave station could be heard. A typical ad is shown from a Radio News Publication.

Grebe was one of the earlier sets to use tone control. The author's set did not have tone achieved by the circuit shown in the Rider's schematic. See Fig. 1. Tone control was achieved by a capacitor of about .1 ufd. from the plate of the first audio tube connected to the tone control switch which had various resistances of from 100 ohms to 4,000 ohms and an open position. The return wire was to b plus. The tone control was fairly effective. Two Grebe 251 A. F. transformers were used in the set. Winding ratios were 4.5; 1. Grebe was one of the few manufacturers using neutralizing capacitors in the r. f. stages. The binocular coils were constructed by locating a pair of coil, forms side by side with the grid winding starting at the bottom of one coil, progressing to the top

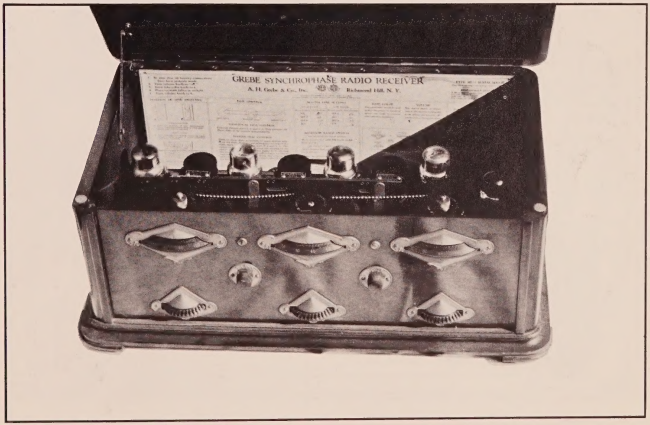


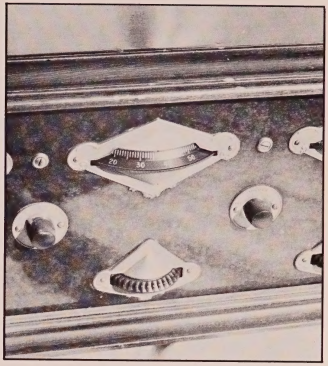
of the coil, jumping over to the top of the other coil and progressing to the bottom. Half way up each coil was a tap which was shortened when the higher frequency tuning band was desired. The plate winding of the binocular coil form located inside one of the two grid forms and thus inductively coupled to that coil.

The set did not cover the broadcast band with one sweep of the tuning dial (dials) but relied upon internal switches activated by tuning the center dial to an extreme end which pushed the internal switching lever to another set of contacts. Grebe gave these instructions to tune the set: ' "Tune all three dials accurately to a station near 50 on the dials. Without disturbing the setting of the other dials tighten thumb nuts U-1 &U-3. This causes the master dial to control the motion of the others and various stations are tuned in by moving the master dial only. Two dial control may by had by unscrewing the thumb nut U-1, using the master dial and left dial for tuning. The verniers should be used for fine tuning."

The testing of the set was performed using two Majestic Supplies. Majestic A provided 6 volts at 2½ amperes and the Majestic Special Master B Supply provided the plate voltages. The Majestic supplies were made by Grigsby Grumow & Hinds Co.

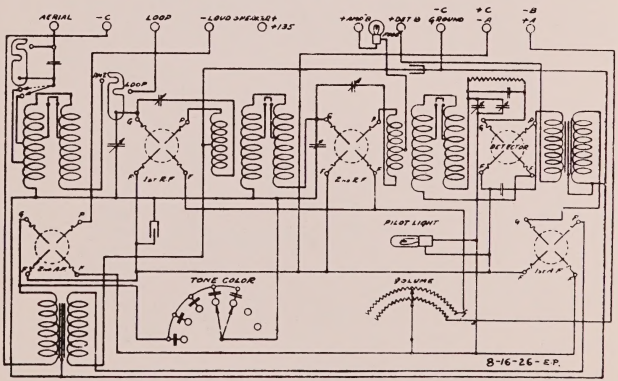
Voltages used were 3.5 volts bias, 25 volts on the detector and 75 volts on the rf and af tubes. 8 milliamperes was consumed by the rf and af tubes and .5 milliamperes by the detectors. Filament voltages of 4.5volts to 4.8 volts as adjusted by the volume control gave a good range of volume for most local stations. The author does not have a battery box which is far more scarcer than the set.

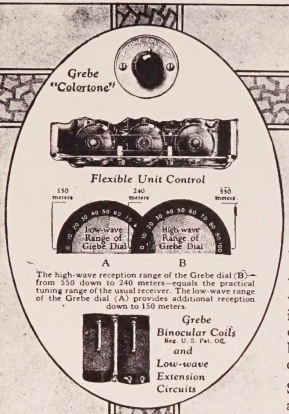




GREBE SYNCHROPHASE RECEIVER TYPE MU-1

A H GREBE & CO, INC RICHMOND HILL, N.Y.




Grebe
"Colortone"
Flexible Unit Control
150 Meters
240 Meters
550 Meters
Low-wave Range of Grebe Dial
High-wave Range of Grebe Dial
A
B
The high-wave reception range of the Grebe dial (B)—from 550 down to 240 meters—equals the practical tuning range of the usual receiver. The low-wave range of the Grebe dial (A) provides additional reception down to 150 meters.
Grebe
Binocular Coils
Reg. U. S. Pat. Off.
and
Low-wave
Extension
Circuits

Always Well in Advance

THE Synchrophase, as usual, is fully a year in advance of other receivers. This is due to those Grebe developments which have contributed so much to the improvement of radio reception. As past experience will show, these advances may be adopted, perhaps next year, on sets of other manufacturers.

So, in buying a Synchrophase *now*, you are assured of a receiver well in advance of others, and a quality of reception which they will take some time in equalling, if ever.

A demonstration by your dealer will convince you.

A. H. Grebe & Co., Inc., 109 West 57th St., N. Y.

Factory: Richmond Hill, N. Y.

Western Branch: 443 So. San Pedro St., Los Angeles, Cal.

This company owns and operates stations WAHG and WHOQ; also low-wave broadcasting stations, mobile WGMU and marine WRMU.

It is written:

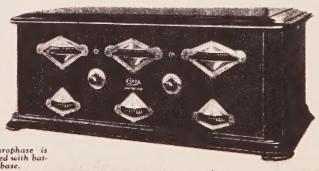
"It is foolish to try to graft a bamboo shoot on a cherry tree."

The adding of Grebe developments to other receivers does not put Synchrophase quality into them. Only Grebe can do that.

Victor Hugo

The Grebe Synchrophase

TRADE MARK REG. U. S. PAT. OFF.



The Synchrophase is also supplied with battery base.

GREBE RADIO

TRADE MARK REG. U. S. PAT. OFF.

All Grebe apparatus is covered by patents granted and pending.

The Myers Tube

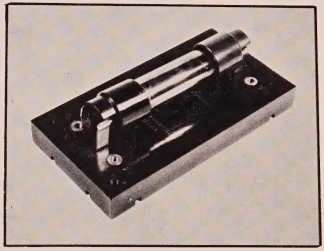
by Russ Winenow W6AVG

Elman B. Myers designed and marketed the RAC-3 Audion aimed at the amateur and experimental trade rather than the broadcast market. It was first advertised in Gernsbacks "Science and Invention" magazine of Dec. 1920. Myers colorful background is covered extensively in Gerry Tyne's book, including a brush with the law in which he barely escaped going to jail.

According to Myers he was chief engineer for Radio Lamp Co. who manufactured tubes for the government during World War One. After the war the company decided to continue making tubes. They signed an agreement with DeForest to pay him $1.00 for each tube made. Radio Lamp then made the RAC-3 in Verona, N.J.

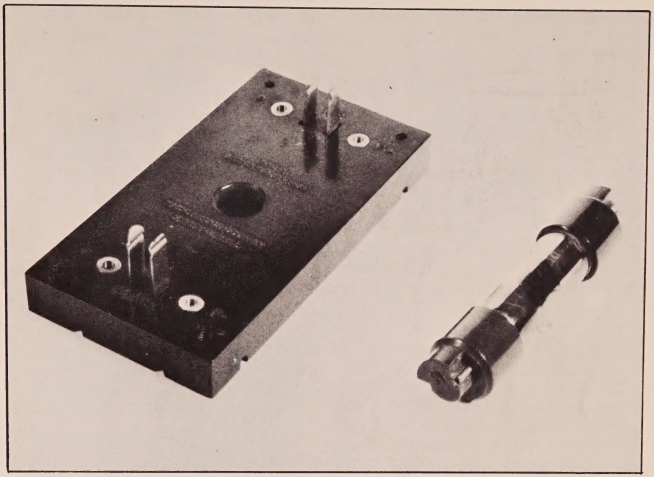
The tube itself was an excellent design as can be seen by the accompanying illustration. The red bakelite cap at the top carried the plate(anode) and one filament lead while the black cap at the bottom held the grid and the other end of the filament. The exhaust tip was in the center, necessitating a relief hole in the special mounting block. The tube clipped into the mounting in a manner similar to a cartridge fuse in its holder. The entire assembly was very sturdy, well put together, and least likely to become damaged by rough handling. The filament was rated at 4 volts and 0.8 amperes. The plate voltage recommended was a maximum of 22 (Tyne says 22 although the ads all say 60).

In 1920, Radio Lamp ran into trouble with RCA and re-incorporated as the Radio Audion Co. and opened a factory in Jersey City, N.J. Next the A.T.&T. Co. filed suit and an injunction was issued in May of 1922, after which the company went broke. Myers then moved to Montreal and set up a Canadian Company, E.B. Myers LTD. He advertised in the U.S. with delivery to be made by mail. Ads appeared in Q.S.T. from January thru August 1922 and Radio News from March thru November 1922. All of these carried the New Jersey address. Ads that appeared in Q.S.T. from



1924 thru March 1925 carried the Canadian address.

During this time, patent rights were more or less finalized leaving RCA in command with only two legitimate manufacturers, Conningham and Moorehead, who proceeded to produce tubes by the thousands. Most of the other familiar names were distributors



only. However, because of the extremely heavy demand, independents cropped up thru-out the entire country. Many ruses were employed to evade the licensing restrictions. For this reason many odd-balls are to be found, which makes it very difficult to identify the makers. One of the most prominent of these bootleggers was the Radio Audion Co. of New Jersey. In "Radio News" of July 1922, there appeared a full page ad for the Myers Audion along with a full facing page ad for a Myers Choke coil.

The choke coil was intended to replace the usual transformer in audio amplifier stages. I have never seen one but sure would like to have one for my collection. In Radio News of December 1921, there appears an article on Choke Coil amplifiers with schematics etc., although there appears to be an error in showing the location of grid leaks in the amplifier stages, which I'm sure would not do the tubes any good!

This coil used the same mounting as the Audion, and the coil itself was similar in appearance to the Audion. The address given was 90 Oakland Ave, Jersey City, New Jersey. The fine print at the bottom of the Audion ad reads, "This tube is not sold or purchased to be used as a detector of wireless waves. Any use or sale of it for such use, renders the vender or user liable to prosecution for infringement of patent. This tube is sold for use in tandem with another device, acting as a detector for the purpose of amplifying either radio or audio frequency signals or as a generator of high frequency ele-

ctrical oscillations." Evidently he did not get away with it because the ads only lasted until November of the same year.

In Radio News for July of 1922, Myers was interviewed for inclusion in a series of articles on "Who's Who" in Radio. During this interview, he says he was first to use galena as a crystal detector, and to have manufactured the first Audions for DeForest, for which he was paid a royality of 30¢ each. He designed and built the first Poulsen arc in 1909 and said that Elwell, who owned the company, pawned diamonds to buy food for the men who worked for him. Also while still with the Poulsen Co., he was associated with Logwood and observed the first beat note of the hetrodyne circuit, brought about by the interference of two radio telephone lines operating between Stockton and Sacramento. Later, returning to the Atlantic coast, he conducted the first transatlantic tests made with an Audion oscillator. As early as 1912, at an expense of $35,000, he erected and operated a high power broadcasting station at Albany. Myers, working with Armstrong supplied the energy with which Armstrong conducted several of his experiments with his regenerative circuit.

The great steel tower, from which the reports of the Dempsy-Carpentier fight were broadcast, was the original tower of the Myers broadcasting station. When the war came,(W.W.1) the Western Electric Co. called on him to take charge of production of the "J" tube. He raised the production from 150 to 5,000 per day. He claims his tube (the RAC-3) has an amplification factor of 30, body capacity eliminated and is capable of covering a band of wavelengths from 150 to 800 meters. He also perfected an advanced type of loud speaker.

I'm afraid the interviewer got carried away.

references

SIGNALING

CONSIDER the vast difference between the methods of the savage and the marvellous broadcasting of today. This difference can be stated in one word —instruments.

Modern broadcasting employs delicate instruments to transform messages into electricity. Satisfactory reception requires equally fine apparatus to translate this current into the original music or spoken word.

Upon your loud speaker or head phones falls the task of transforming the electric current that flows through your set into sound. Poorly designed or carelessly constructed instruments cannot do this with satisfaction to you.

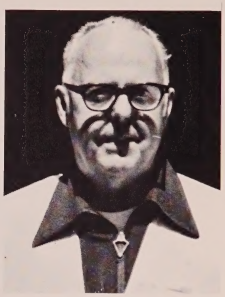
Holtzer-Cabot Phones and Loud Speakers are the perfected results of 25 years' specialization in the manufacture of sensitive electric apparatus.

ATWATER KENT
RADIO
10 J Q K A
ATWATER KENT
RADIO
A

ATWATER KENT
RADIO
TWO PACKS
ATWATER KENT
RADIO
PLAYING CARDS
ATWATER KENT
RADIO

"THE HYLO – 1904"

by Floyd Lyons



EDITORS NOTE:

Antique radio collecting can have many interesting side hobbies. Many of us are involved in collecting meters, batteries, light bulbs, advertising goods, etc. In light of this, the Journal will feature from time to time an article about one of these interests.

How many of you collectors have a few pinched tip light bulbs in your collection? In this issue Floyd Lyons relates the story of the well known HYLO bulb. Floyd is a nationally known authority on radio tubes and light bulbs.

From the first part of this century two-filament bulbs have been a part of the American scene. The term, "Hylo", is used to herein more to describe an effect than a name. This article, then, is really a treatise on all double-filament lamps - Economical, Hylo, Turn-Down, Pull-String and others. The general purpose of subject lamp is and was to furnish the user with a high and a low candle-power filament, all in one bulb. This is the economical way. Another method for varying

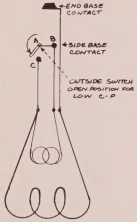


Figure 1a

Figure 1b

Figure 2b

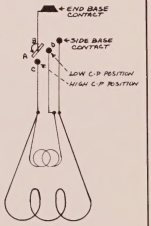


Figure 2a

the C. P., although usually more wasteful, is by connecting external resistance in series.

Controlled variation in the Hylo bulb is accomplished by a built-in switch, so that the two filaments may be used separately, in parallel, or in series, thus obtaining various candle powers. The early standard ratings were 1 C.P. and 16 C.P. When burning dim, this lamp consumed one-sixth as much wattage as when operating on 16 C. P. The Hylo included all the recognized advantages of the regular electric lamp - such as economy, uniformity of intensity and comparative small heat radiation. It also possessed its own benefits of choice of C.P., convience and subdued light.

Types and Styles

In the Economical Pull-String type shown in Figs. 1a & 1b, the switch consists of a pivoted metal segment A (attached to the base B) which may be rotated slightly by means of the cords so as to touch an auxiliary contact C. This short-circuits the small filament and lights the high candle power filament. By shifting the segment off the contact C, both filaments are in series, but only the small filament is lighted. To put out the light, a line switch should be used.

Shown in Figs. 2a & 2b is a Hylo Pull-String lamp. Switch A is concealed in the base, and provides three positions for control: 1 C.P., 16 C.P., and out. The built-in switch is pivoted at its center B, and the lamp circuit is completed when connection is made at either of the contacts C or D. The switch makes contact at only one of these points at a time. When connection is made at D, both filaments operate in series, and the small filament is lighted. When the switch is pulled over to C, the small filament is open-circuited and the high candle-power filament burns alone. By pulling the switch clear of both C and D, the lamp is out.

In the Turn-Bulb Hylo, Fig. 3, there is an additional contact on the base made in the form of a flat spring A, which may be pressed down onto the rigid terminal B by screwing the lamp farther into the socket. Thus, on inserting the lamp one obtains first the low, then the high candle-power. In the first case, both filaments operate in series - and in the second case, the small filament is short-circuited.

The Long-Distance type lamp, Fig. 4, is controlled by a three-contact switch attached to a six foot triple conductor cord. The cord is attached to the lamp with three clamps similar to glove fasteners at B, C and D. Switch A operates to give high, low, and out when in contact at points E, F, and G, respectively.

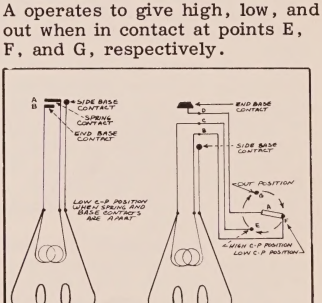


Figure 3 *Figure 4*

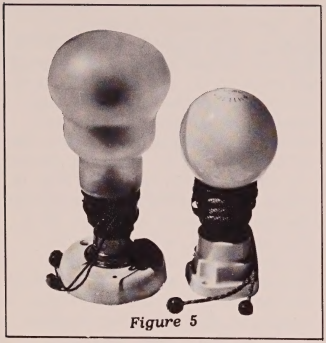


Figure 5

In Fig. 5 are shown two British versions of the Philips 2-Fil. bulbs. The larger one on the left is circa 1920's, and the milk-glass specimen on the right would date in the late 40's and early 50's.

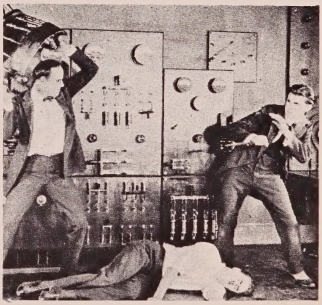
Most of the Hylos were carbon fil. with a screw base. We have seen two other variations: One was a Phelps Tungsten 27 C. P. Pull-String (circa 1915-27)... the other was a carbon fil. with a Thomson-Houston Turn-Down base.

The Hylo could be used in the hallway or bathroom when a minimum of a dim light was desired at all times. Instant bright light was always available. It created a relaxed atmosphere for the den. It permitted a low light in the bedroom for people who desired an all-night light.

The two-filament lamp was handy as a basement light (or in a group of lights). All the lamps could be turned down dim and the circuit controlled from one switch at basement entrance. Each light could be turned on bright, and back to dim, independently. Upon leaving the basement all lights could be turned off at the central control switch. This lamp was very convenient for the sick room. It permitted, on the dim adjustment, attendants to move safely about the room and still not annoy the sleeping patient.

We observe from the foregoing that the benefits of controlled light were recognized early. Two-filament lamps have been consistently improved from the day they first came on the market. One has to but look at today's three-way bulbs to realize that multi-filament and multi-wattage lamps are here to stay. Only now, instead of being 1 C.P. and 16 C.P., the standard ratings are 50W, 100W, and 150W. A 25W, 40W, & 60W arrangement may soon become a reality. One could then say that we have come full circle.

Ref: Hylo Brochure, Hylo Lamp Co. - 1904, Bulletin 14, Engr. Dept., NELA - 1910



Restoration Hints

by Wm. Herbert Brams

Cleaning Radio Cabinets

I have found that a product called plastic steel wool substitute, used often in dishpan scouring pads, is excellent for cleaning dirt and grime from radio cabinets. It is soft enough so that it doesn't scratch the finish, but it does not crumble away with hard scrubbing.

Staining Light-Colored Wood

When trying to darken light-colored wood, I have found that conventional stains often give an unpleasant "Zebra" effect - very light areas contrasting with very dark ones. Instead, try applying ordinary brown paint, slightly thinned, and wiped off carefully. This gives a more uniform coloring. Also, I paint the edges of cabinets with exposed grain a dark brown. This eliminates the raw look of such areas and gives the cabinet a more "Finished" appearance.

Loose Knobs

If a slide-on fits loosely on a shaft, coat the shaft with plastic glue and allow to dry. The increased diameter makes the Knob fit better.

Fixing Broken Set-Screw Knobs

If a set-screw knob has been broken by over-tightening, put the pieces together in position and hold the knob together with a rubber band. Then fill the underside of the knob with epoxy glue and allow to harden. This gives a much stronger bond than just gluing the pieces together.

Stringing Dial Cord

When replacing dial cord, tie one end of the new cord to the tension spring. Pass the free end of the cord through the hole or slot in the rim of the wheel on the tuning capacitor and pull the cord so that the spring is against the inside of the rim. Proceed to string the rest of the set. Pass the end of the cord back through the rim hole and tie the cord to the spring. Stretch the spring and attach the free end to the appropriate mounting hole on the wheel. If the cord is too slack, twist the spring several times to shorten the cord before attaching the free end.

Preventing Dial Cord Slipping

To prevent dial cord from slipping on tuning shafts, swab the string with a solution of rosin (available from music stores) dissolve in alcohol.

Starting Nuts

To start a nut on a screw in an inaccessible location, hold the screw, then take a wood pencil, press the eraser end on the nut, and turn until the nut catches on the threads.

Planetary Vernier Drives

If a planetary vernier drive is slipping and can't be fixed by lubrication or by tightening the screws, spray the mechanism with degreaser to remove the grease inside. Often the increase friction will allow it to operate normally.

Dial Belts

The rubberized fabric dial drive belts, commonly found in Zenith radios, have often broken or become frayed and must be replaced. Rubber tape recorder belts can be used as replacements but these often give the tuning a mushy feel. One can use belting material obtained from a sewing store. This is a flexible but non-stretchable strip of fabric used for making belts. Cut out a strip about ¼ inch longer than exactly needed. Glue the ends together with about an 1/8 inch overlap using epoxy glue. The new "Crazy Glue" may also work. The trick is to get the length exactly right as the tension pulley should pull the strip slightly inwards, but the belt should not rub against itself. If the new belt slips, apply a solution of rosin dissolved in alcohol.

QUOTES

"He who has heard but part of the truth", said Chaung Tzu "thinks no one equal to himself. Compare your present outfit with a Grebe."

Doctor Mu

submitted by Elliot Vinson

The EMMY Award

Ever wonder how the Emmy Award got its name? Well it wasn't after anyone named Emmy. The name Emmy is a variation "Immy", which stands for "Image Orthicon Tube", the main tube in television cameras.

Editor's Corner

Thanks to all of our members for your continued support of the journal. I would like to welcome a new member of the editorial staff, Scott Welch. Scott will be the draftsman for our publication. Schematics or other such items needing touch up or complete redrawing will be handled by Scott. We welcome members participation in making the Journal more informative and interesting. If you have any questions pertaining to the Journal, or if you would like to submit an article, please write to the Editor.

Journal Deadlines:

Sept '80 issue:
Articles - June 15, 1980
Ads - August 15, 1980

Dec '80 issue:
Articles - Sept 15, 1980
Ads - Nov 15, 1980

Mar '81 issue:
Articles - Dec 15,1980
Ads - Feb 15, 1981

Please note the new deadlines, we are trying to gear up and get the Journal out on time.

PHILCO
DRYNAMIC RADIO
BATTERIES

COLLECTOR AIDS

WANTED: Riders manuals volumes 1, 2, 3, 4, 5 and 7. Also indexes for all Rider Radio & TV volumes. I have an extra volume 6 and a PA volume 1 for possible trade. I might be willing to trade xerox copies of individual schematics too. Want chassis for AK model 84 cathederal (or one that would fit). Chassis for Philco 84 cathederal. I think a number of Philco two knob chassis will fit. Also want cabinet for Philco 60 Cathederal. Roy Yost, 535 Geneva Ave., Apt. 2, Redwood City, CA 94061

FOR SALE: Wireless Specialty Apparatus Co. "IP 76" (1906). Offers. Richard Sepic, 1945 E. Orange Grove Blvd., Pasadena, CA 91104 (213) 791-3222

WANTED: Socket for an R205-D (page 287 Saga). Also a socket mount or clips for a Meyers RAC-3 Audion (page 333 Saga). Doug Brighton Box 158, Hanover Ontario, Canada, N4N 3C4

FOR SALE: Reproductions of red Pushbuttons for late 30's Philco radios ($6.00 for a set of 8). Send me an original button so that I may match the length. Wm. Herbert Brams, 2427 Durant #4, Berkeley, CA 94704

WANTED: Schematics--will pay going rate for the following: ERLA S51, Clapp-Eastham Radak Model DD. Need a few QST's of the years, 1916, 1919, 1920, 1921 and 1922. Will pay top price for Bremer-Tully two ganged variable capacitors. Dave Brodie, 315 Cotton St., Menlo Park, Calif. 94025 (415) 323-0353

WANTED: Magnetic Horseshoe Pick-up for late 20's Magnavox Radio. John Polk, 130 Tamal Vista Dr., San Rafael, Cal., 94901 (454-3298)

WANTED: Stromberg-Carlson Model 83 knobs and tuning meter. Steve Lohse, 1038 Jacqueline Way, San Jose, Calif., 95129 (408-252-6283)

WANTED: E.H. Scott Copper Units; Special Communications RCVR; Early Thirties Units. Bob Fabris, 3626 Morrie Dr., San Jose, Cal., 95127

WANTED: Volume Control for an RCA Model 48 Chassis. Larry La Duc, 1356 Munro Ave., Campbell, Calif., 95008. (408-374-7697)

TUBES FOR SALE: All tubes are unused and are in original cartons. Old numbered types: 1V, 24A, 30, 36, 37, 39/44, 41, 55, 56, 57, 58, 76, 78, @ $2.50 each. 38, 49, G-53, G-59-B, 79, 82, @ $4.00 each. Sparton types 436 and 70, globe shape envelope, @ $5.00 each. Loctal types: 7A5, 7A6, 7Af7, 7B6, 7B8, 7E6, 7G7, 7H7, 7R7, 7Y4, 7Z4, 14A7, 14C5, 14C7, 14H7, 14J7, XXFM, @ $2.00 each. Other old tubes: 1J6, 1S4, 2A5, 2B7, 5Y3, 5Z3, 6C6, 45Z3, @ #2.00 each. 12A5, 12A8, 12AH7, 12F5, 12J7, 12K7, 12Z3, @ $1.50 each. 10% discount on pur-

WANTED: Neutrowound broadcast receiver. Clarence Page, 16370 Acorn Dr., Sonora, Calif. 95370

The Outstanding Value *in* New Kennedy Radio Sets

The new Kennedy Radio Model V is everywhere acknowledged as the one outstanding value in the radio field today.

The receiving unit in Model V is a distinct advance in radio engineering. It is a special development of extensive research in the Kennedy Laboratories and was produced in response to an insistent, popular demand for more simplified apparatus. After initial settings are made, all tuning is controlled by a single dial. Yet, with this extreme simplicity of operation the selectivity of the earlier Kennedy models has been retained. The new unit responds to all broadcast wave-lengths and operates on any ordinary antenna.

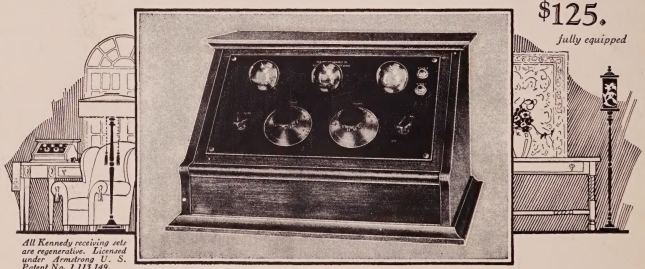
The cabinet is of solid mahogany and follows a pleasing design that adapts itself to home surroundings. Equipment includes all tubes, dry batteries, Kennedy phones and plug—batteries are fully enclosed. Price, complete, $125.00.

More elaborate Kennedy furniture models range from $285.00 to $825.00, completely equipped, including built-in loud speaker.

See the new Kennedy furniture models at your dealer or write us for fully illustrated particulars.

THE COLIN B. KENNEDY COMPANY

SAINT LOUIS SAN FRANCISCO



$125.
fully equipped

All Kennedy receiving sets are regenerative. Licensed under Armstrong U. S. Patent No. 1,113,149.

KENNEDY

The Royalty of Radio